

## **Why should I attend the training to become certified in the use of “Field Search Software”?**

- ❖ A certificate of completion will be provided to each attendee upon successful completion of this course by the Certified Field Search Instructor. This certification provides credibility to the attendee and will enhance courtroom testimony.
- ❖ Our mobile computer lab case studies include: Arson Investigation, Bombings, Financial Crimes, Homicide Investigation, Probation Enforcement and URL (Website) search recovery.
- ❖ How will attending this training help me do my job and support public safety:

**Patrolman/ Detectives/ Federal Agents:** Officers use “Field Search Software” during the initial phases of an investigation to determine if a computer has relevant case information. Previewing the computer’s hard drive will frequently substantiate evidence of a crime. Examined peripheral devices (USB drives, CD’s, external hard drives, tablets, SD, Micro-Sims Cards, multi-card readers, etc.) may also provide critical case information. Field Search Software will pre-view the computer video’s (still frame critical events), collect images in a gallery viewer, recover archived chat logs, examine browser history, document registry information, view documents, and easily merge this information into a detailed court worthy report. The zipping tool allows for the copying and exporting of the critical information from the target computer back to the USB. Law Enforcement uses Field Search Software to keep our communities safe across the country for probation monitoring, parole supervision, sex offender monitoring, knock and talks, search warrants, and administrative oversight. A great tool for gathering intelligence, uncovering counterterrorism activities, or just sharing information.

A newly developed search function provides the user the ability to scan a drive for file hits against known HASH sets. A **HASH** is a virtual “fingerprint” of a computer file. Each computer file, via a mathematical algorithm, produces a unique set of letters and numbers that identifies it; change one letter in a file or one pixel in a picture, and the file generates a new HASH. The National Center for Missing and Exploited Children maintains a HASH database of all known child pornography images-files, and if a law enforcement agency has access to that database, analysts can use Field Search to compare the files on a computer hard drive and locate matches from the data base. Our training covers collection techniques, submission guidelines, and networking contacts (NCMIC/ ICAC/ Project VIC.).

Our training class will also provide information on “shareware” and “open source diagnostic tools”. For example: a “hash utility tool” will calculate files to MD5 and SHA1 value. You can easily copy the MD5/SHA1 hashes lists into txt., .html, .xml for file comparison. Use the “batch hashing” tool to process hundreds of CP images from a folder at one time and save that data into an excel sheet automatically (ID via SHA1 base32, MD5, SHA-256, CRC32). That list can then be provided to the appropriate law enforcement agency in hopes of identifying and linking victims of child exploitation.

The meta-data viewing utility can prove helpful in extracting information from a photo; view picture creation file date & time, device used to create digital image, recover GPS-GEO tag identifying latitude-longitude for image. Convert latitude and longitude in google-earth to see where picture was taken on map. Use cropping tool for parching videos into .pdf pages, or power point slides. Extensive literature library included; “Best Practices” literature, community corrections, probation monitoring guidelines, etc..

**School Resource Officers:** SRO’s and school administrators may use FS to review the digital information being stored on school-issued tablets or computers. FS is a powerful tool used to quickly and efficiently search computer equipment and determine if devices were used by students outside, or against, school usage policies. Did the computer download banned images, music, or access prohibited social media sites?

**Narcotic/ Gang Officer-** Search for a suspect phone number, name, street address, e-mail addresses, financial account numbers, bank routing numbers, social media information- artifacts, chats history, photos, videos, search for UPS shipments via tracking numbers, or scanned U.S. Postal email service letters. Examine chat activity for Skype, Windows Live, ICQ and Yahoo Messenger.

**Probation/ Parole Officer:** Field Search is used regularly to monitor offenders on parole and probation viewing their computer usage for evidence of legal, or illegal activities. Whether accessing illegal pornography, visiting prohibited dating sites, communicating in violations of court orders, visiting known gang-related sites, or the computer indicates recidivism, the digital oversight process may prove invaluable. Conversely, Field Search may also confirm an offender's claims that he, or she, has been using the Internet to search for a job, obtain suitable housing, or engage in some other productive activity. With Field Search this information can be collected and presented to the court in an easy to understand detailed report.

The National Center for Missing and Exploited Children maintains a HASH database of all known child pornography files, and if a law enforcement agency has access to that database, analysts can use Field Search to compare the files on a computer hard drive and locate matches. This function can also tell probation and parole officers if clients have downloaded software they are not permitted to access. Digital evidence represents a critical element in the investigation of new crimes and the pre/post-conviction supervision process.

**Community Corrections/ Corrections Officers:** The community corrections staff monitors offenders that are released into our communities. This can be a difficult task, but field search software can help monitor the digital activities of these offenders. Access to the Internet and social media maybe an entitlement of some probationers. Recent U.S. Supreme Court ruling (Packingham vs. North Carolina)- Law prohibiting previously convicted sex offenders from accessing or using "social networking" websites violates the First Amendment. Ensure offenders follow the conditions of their release by monitoring their computer activity. Correctional institutions regularly monitor the desktop computers/ laptops/ and tablets within the governmental institution for any signs of illegal activities from inmates, or staff. FS may aid in this process.

**Fire Department Arson Investigators:** Review surveillance video and capture still frames from that video for inclusion in the self-generating report. Identify the offender's action before, during, or after the incident. Identify witnesses from the video. See what documents are on the target computer (Life insurance policy, death benefits, threat letters, etc.). See what websites the computer was accessing and what was researched (Suicide, bomb making, explosive materials, arson, fraud, Maps, etc.). Examine Internet browsers; Explorer, Edge, Firefox, OPERA, etc. Use the advanced hash analysis tool for locating images or documents.

**Government Employee & I.T. Staff:** Government, or correctional facilities, may at times use field search to monitor the institutional computers that personnel and inmates can access. Vetted active professionals and I.T. staff monitor government computer networks to ensure legal compliance, access protection, access limitations, as well as the safety of our communities. Criminal justice personnel across the country assist with software management, technical advice, expertise, and assistance during enforcement activities.

**U.S. Military/Boarder Security:** A soldier performing a field check on a computer recovered during an improvised explosive device (IED) investigation. Border security and counterterrorism. One of the most significant improvement expands the keyword search function to include the capability to search for a word, or phrase, in any language. Not just any language that uses the Latin alphabet. Version 5.0 adds the capability to query in any language spoken on this planet, whether it uses the Latin alphabet, Arabic, Cyrillic, or Eastern language characters, or anything else.